

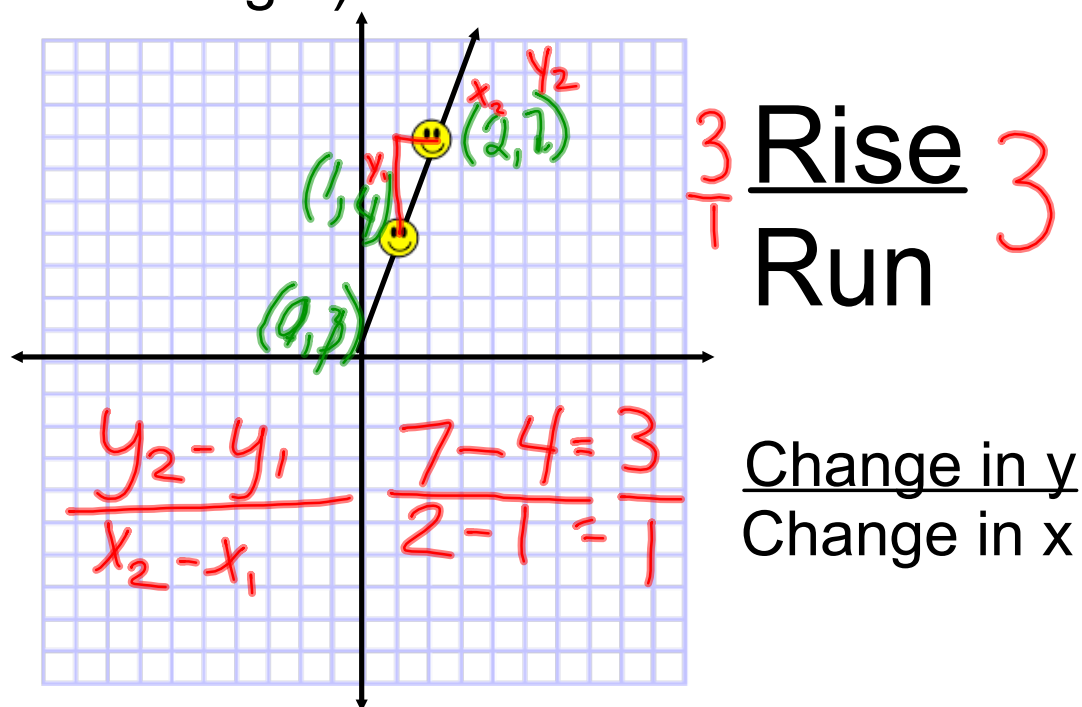
# **SLOPE, Part 2**

**Objective: Understand what the slope of a line is, and how to find it using the formula.**

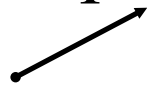
**Learner Profile: Reflective**

February 24, 2011

When looking at a line, you can find the slope by counting the rise (vertical change) over the run (horizontal change.)



**Positive:** slopes up from left to right;



**Negative :** slopes down from left to right;



**Zero:** horizontal line;



**Undefined slope:** vertical line.



# SLOPE - of a Graph

Slope is determined by any two points on a line.

$$\frac{y_2 - y_1}{x_2 - x_1}$$

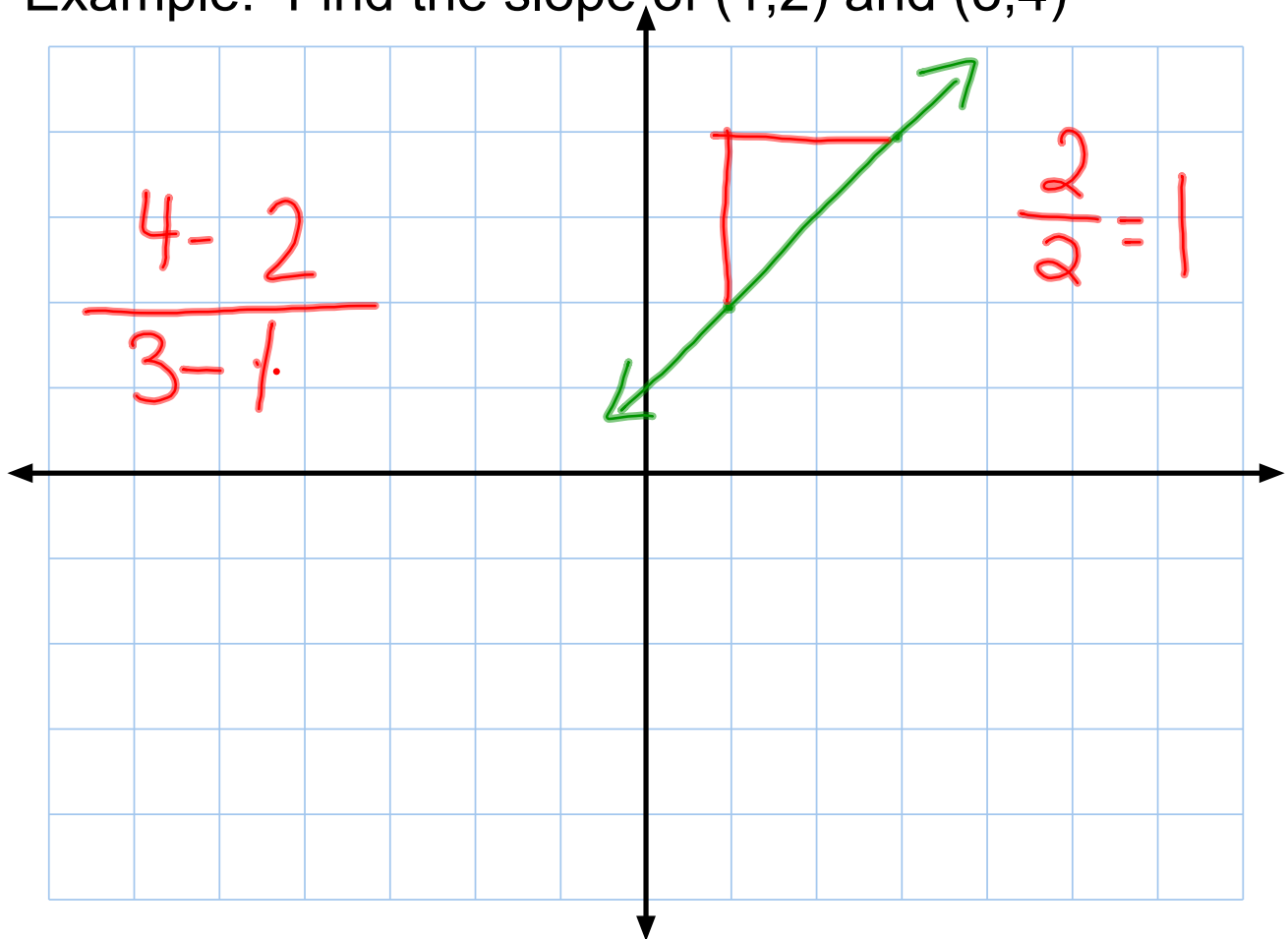


# SLOPE

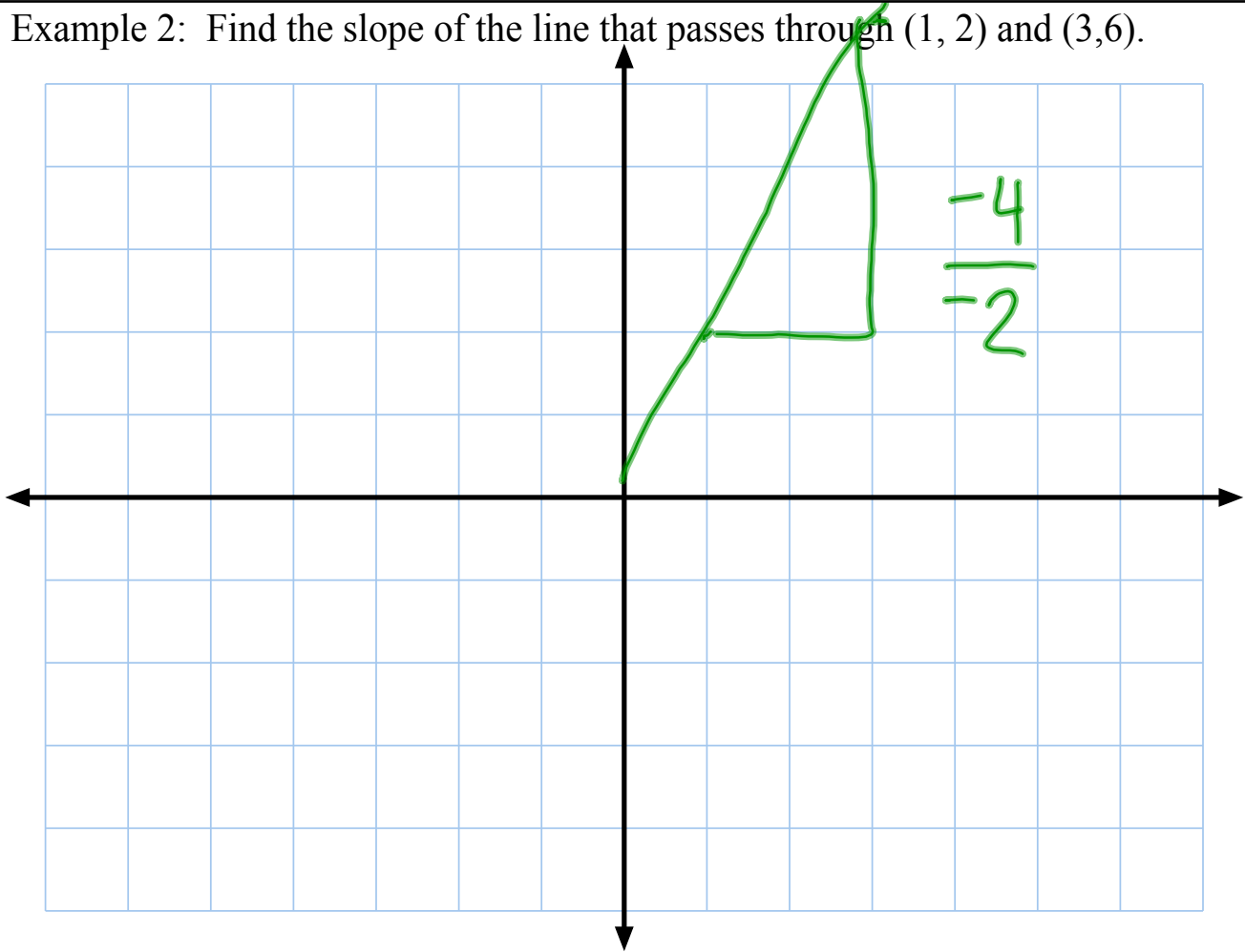
To find the slope:

1. We need to find the **rise** (or the change in the **y values**)
2. We need to find the **run** (or the change in the **x values**)

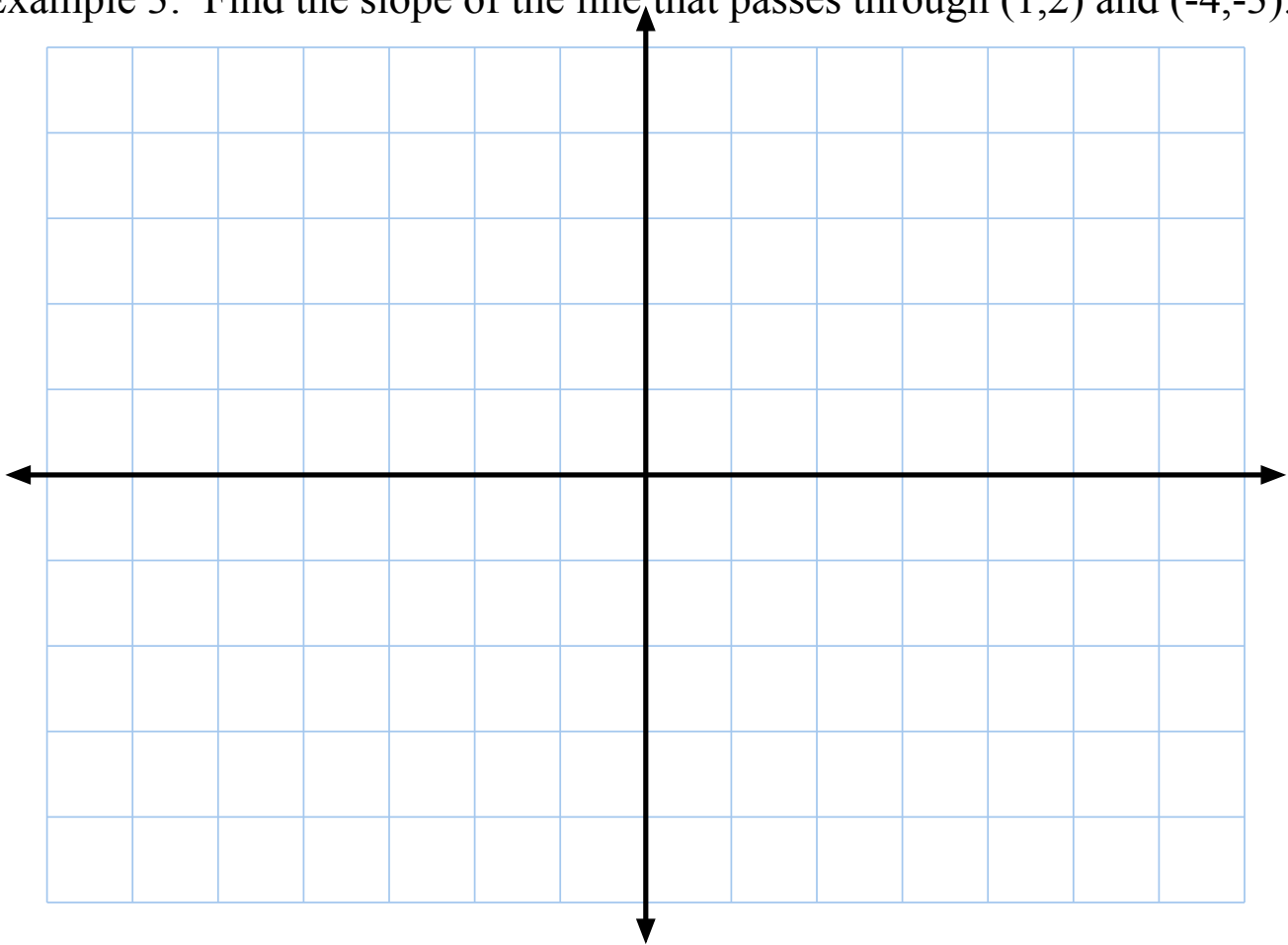
Example: Find the slope of (1,2) and (3,4)



Example 2: Find the slope of the line that passes through (1, 2) and (3, 6).

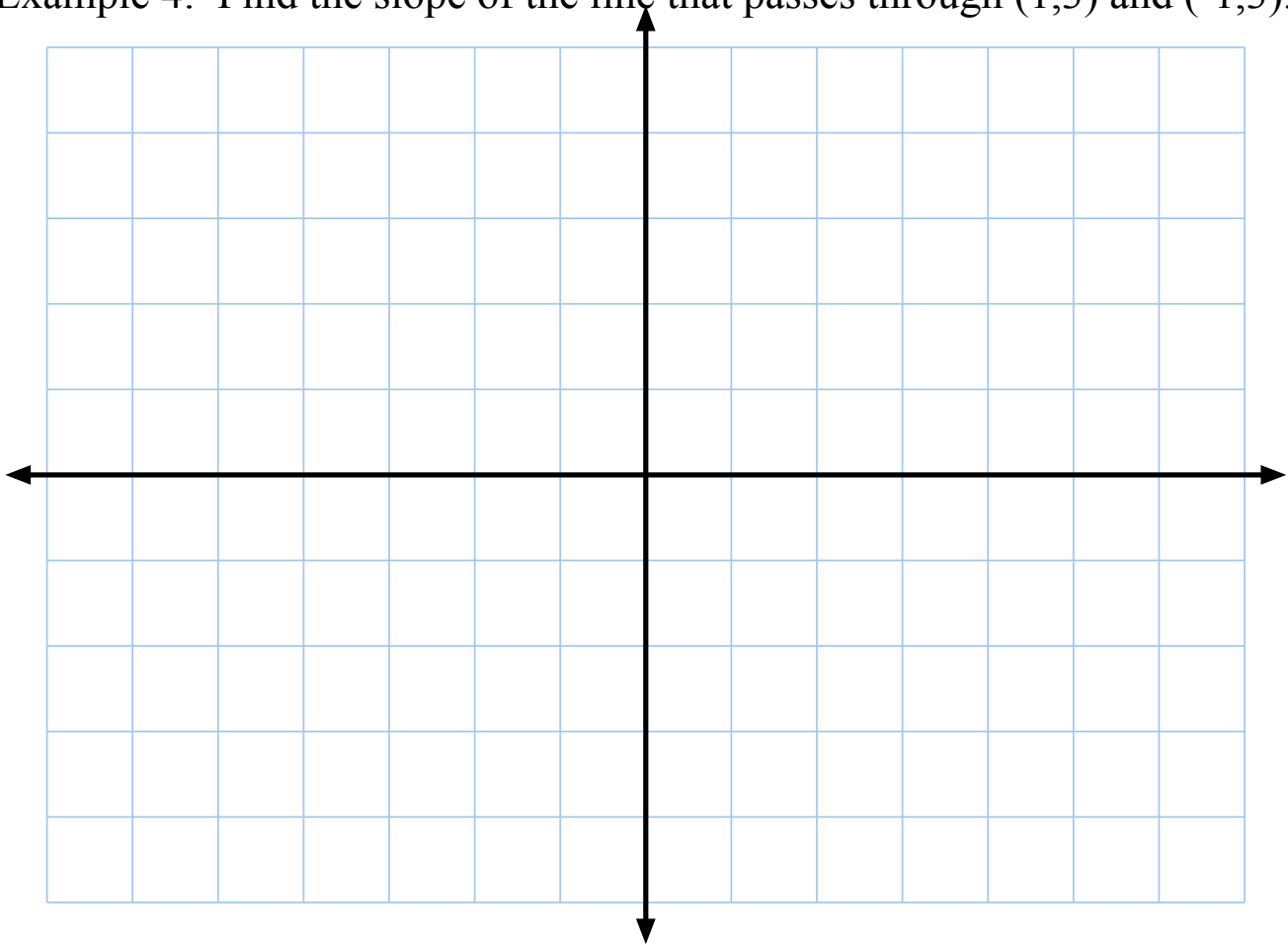


Example 3: Find the slope of the line that passes through  $(1,2)$  and  $(-4,-3)$ .





Example 4: Find the slope of the line that passes through  $(1,3)$  and  $(-1,3)$ .



Example 5: Find the slope of the line that passes through  $(1,-1)$  and  $(1,2)$ .

